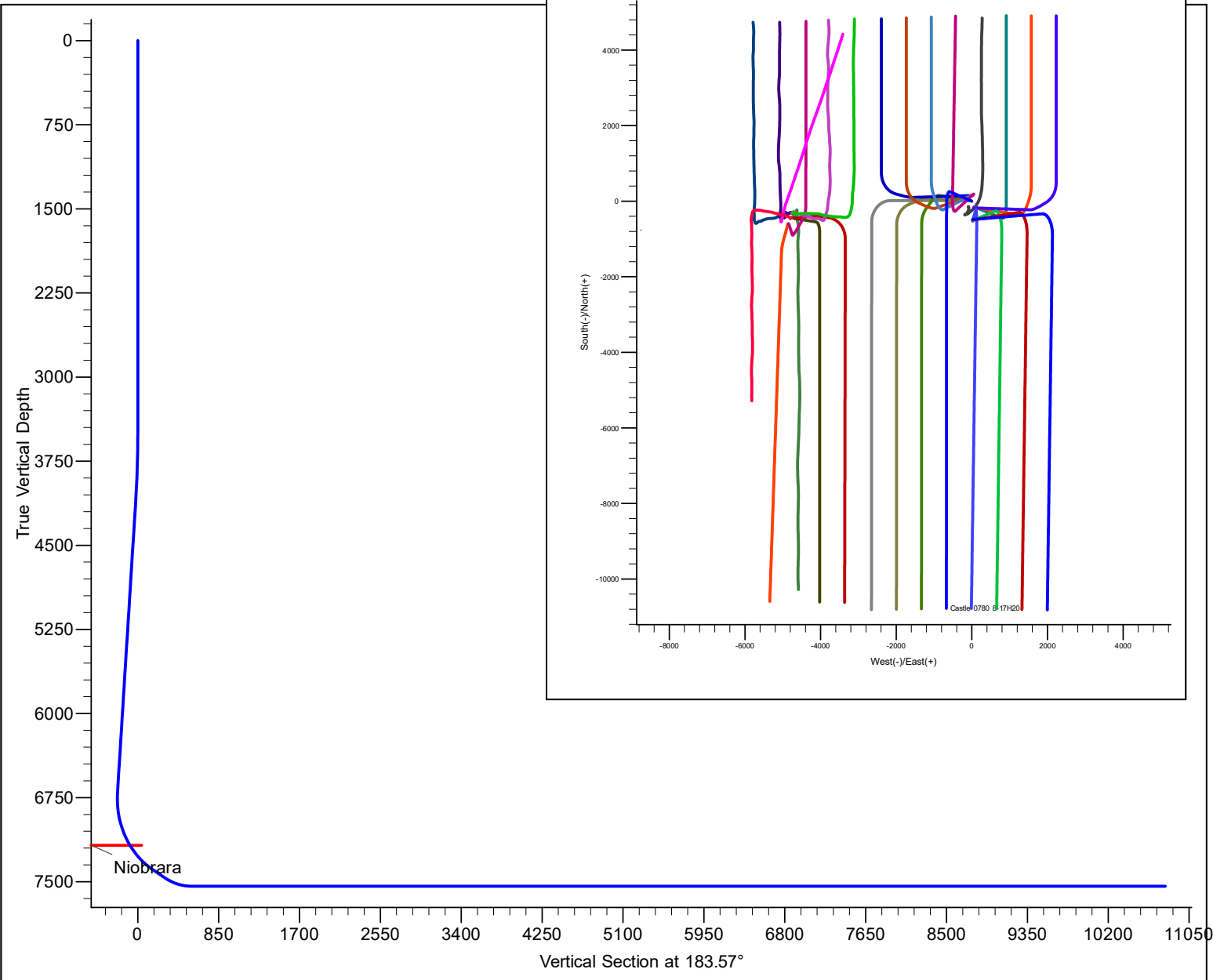


PROJECT DETAILS: North Park Basin										<div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div></div></div> <div><div>Azimuths to Grid North True North: 0.57° Magnetic North: 10.46°  Magnetic Field Strength: 53191.9snT Dip Angle: 66.98° Date: 12/31/2009 Model: IGRF200510</div></div>	
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: Colorado Northern Zone  System Datum: Mean Sea Level											
FORMATION TOP DETAILS										CASING DETAILS	
TVDPPath 7175.0		MDPath 7272.9		Formation Niobrara		DipAngle 0.00		DipDir		No casing data is available	
DESIGN DETAILS: Design #1											
0' Vertical Section coordinates										Project: North Park Basin Site: T7N-R80W-S9 Well: Castle 0780 8-17H20 Wellbore: Wellbore #1 Design: Design #1	
Type TD	Target	Azimuth 183.57	Origin Slot	Type	N/S 0.0	E/W 0.0	From	TVD 0.0			



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3500.0	0.00	0.00	3500.0	0.0	0.0	0.00	0.00	0.0		
3	4112.4	12.25	293.39	4107.7	25.9	-59.8	2.00	293.39	-22.1		
4	6773.7	12.25	293.39	6708.5	250.0	-578.0	0.00	0.00	-213.5		
5	7591.6	60.00	180.03	7388.1	-109.7	-667.7	8.00	-119.06	151.1	Castle 8	
6	7741.6	60.00	180.03	7463.1	-239.6	-667.8	0.00	0.00	280.7		
7	8041.6	90.00	180.03	7539.9	-526.1	-667.9	10.00	0.00	566.6	Castle 8	
8	18294.6	90.00	180.03	7539.9	-10779.1	-672.4	0.00	0.00	10800.0	Castle 8	